

### ABSTRACT

The present invention provides a novel method of hydrogenating a phenol for hydrogenating a phenol industrially advantageously. The present invention relates, in the case of phenol hydrogenation in which carbon dioxide is made to participate in the reaction, to a method of hydrogenating a phenol characterized by using a supported rhodium and/or ruthenium catalyst, whereby the phenol is hydrogenated efficiently at a lower reaction temperature than with prior art; such a method characterized in that carbon dioxide having a temperature of 20 to 250°C and a pressure of 0.1 to 50 MPa is used as the carbon dioxide; and such a method characterized in that hydrogen under conditions of a temperature of 20 to 250°C and a pressure of 0.1 to 50 MPa is used.

An environmentally friendly phenol hydrogenation process that uses no harmful organic solvents can be realized.